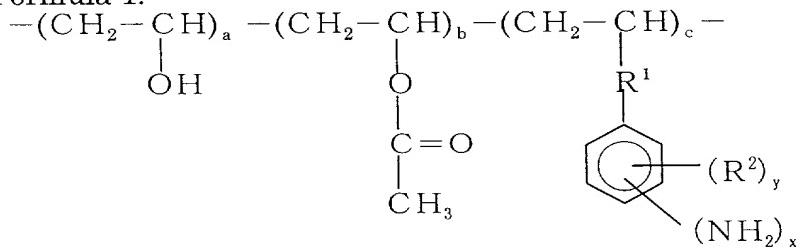


ABSTRACT OF THE DISCLOSURE

The present invention provides a composite reverse osmosis membrane as a polyamide membrane including a side chain amino group such as a residue of a polyvinyl alcohol-based amine compound represented by Formula 1. Such a membrane can remove organic impurities under a low pressure, providing an economical method for removal of impurities. An aqueous solution including a polyvinyl alcohol-based amine compound having a side chain amino group represented by Formula 1 is applied on a polysulfone-based ultrafiltration membrane as a microporous support. Next, trimesic acid chloride solution is applied causing interfacial polycondensation, which generates a reverse osmosis membrane. When this composite reverse osmosis membrane is evaluated by using a pH 6.5 aqueous solution including 500mg/l of sodium chloride at an operation pressure of 5kg/cm² and at a temperature of 25°C, the permeable flux is at least 1.5m³/m²·d, and the salt rejection is 80% or less.

Formula 1:



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wherein 0<a, 0≤b, 2≤c, 1≤x≤5, 0≤y≤4; R¹ is at least one group selected from the group consisting of an ether group, an alkylene group and an ester group; and R² is at least one group selected from the group consisting of an alkyl group and a halogen group.